



US 20040211694A1

(19) **United States**(12) **Patent Application Publication**

Coon et al.

(10) Pub. No.: US 2004/0211694 A1

(43) Pub. Date: **Oct. 28, 2004**(54) **WIRE-COIL PACKAGING DRUM WITH IMPROVED BOTTOM ASSEMBLY**

## Publication Classification

(76) Inventors: Thomas D. Coon, Wilmington, DE (US); Randall Adams, Van Wert, OH (US)

(51) Int. Cl.<sup>7</sup> D65D 85/67

(52) U.S. Cl. 286/408; 206/407

## Correspondence Address:

VORYS SATER SKYMOUR PEASE  
1828 L STREET NW  
ELEVENTH FLOOR  
WASHINGTON, DC 20036

(57)

## ABSTRACT

A game machine (2, 200) which includes a playing field (6, 340) traversed by objects, such as balls (320). The playing field can have plural drop zones (381-383) which can be selected by the player using defectors (108-110) that control where the balls are launched. Detectors (22, 392) indicate scoring positions assumed by the balls. A payline display (28, 335) displays scored events. A symbol selector is included to select symbols which are variably assigned to the scoring positions and displayed on displays (28, 397). The balls score symbols which can be displayed in the payline display and affect winning or bonus play. Game machine (200) includes traditional slot machine reels which works in conjunction therewith.

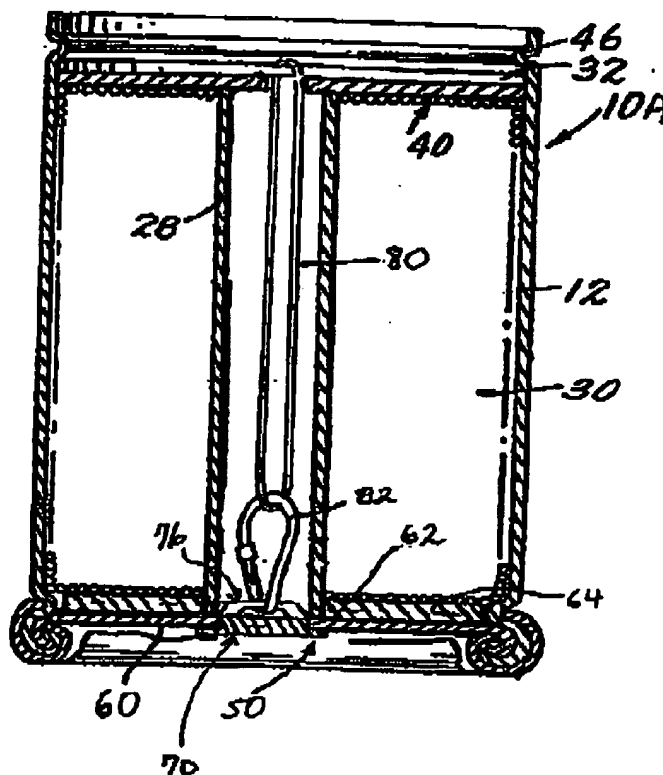
(21) Appl. No.: 09/937,282

(22) PCT Filed: Mar. 23, 2000

(86) PCT No.: PCT/US00/07679

## Related U.S. Application Data

(60) Provisional application No. 60/126,338, filed on Mar. 26, 1999.



PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification:

B65D 85/66

A1

(11) International Publication Number:

WO 00/58181

(43) International Publication Date:

5 October 2000 (05.10.00)

(21) International Application Number:

PCT/US00/07679

(22) International Filing Date:

23 March 2000 (23.03.00)

(30) Priority Data:

60/126,338

26 March 1999 (26.03.99)

US

(71) Applicant (for all designated States except US): GREIF BROS. CORPORATION [US/US]; 425 Winter Road, Delaware, OH 43015 (US).

(72) Inventor; and

(75) Inventor/Applicants (for US only): COON, Thomas D. [US/US]; Greif Bros. Corporation, 425 Winter Road, Delaware, OH 43015 (US). ADAMS, Randall [US/US]; Greif Bros. Corporation, 425 Winter Road, Delaware, OH 43015 (US).

(74) Agents: SHAPIRO, Mitchell, W. et al.; Vorys, Sator, Seymour and Pease LLP, 11th floor, 1528 L Street N.W., Washington, DC 20036 (US).

(81) Designated States: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW. ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TO).

Published

With international search report.

BEST AVAILABLE COPY

(54) Title: WIRE-COIL PACKAGING DRUM WITH IMPROVED BOTTOM ASSEMBLY

(57) Abstract

An improved wire-coil packaging drum comprises a drum (10A) with a bottom heading (60) having a hole (62), and an anchoring member mounted to the bottom heading (60) and cooperating with the hole (62) such that an anchoring portion (76) of the anchoring member (70) is disposed to anchor a hold-down system for a wire coil received in the drum. The anchoring member may comprise a snap-mounted plug that is conveniently inserted into the hole (62) of the bottom heading (60), with the hold-down system comprising an elastic loop, such as a rubber band (80), which may be secured to the plug by a cable tie (82) or the like.

